

[Name of Document] SPECIFICATION

[Title of the Invention] METHOD FOR MANUFACTURING

INSULATING RESIN LAYER, SUBSTRATE FOR ELECTRO-OPTICAL
DEVICES, METHOD FOR MANUFACTURING ELECTRO-OPTICAL
DEVICE, AND ELECTRO-OPTICAL DEVICE

[Claims]

[Claim 1] A method for manufacturing an insulating resin layer, comprising:

a step of forming a photosensitive resin layer on a substrate;

a first exposure step of performing exposure for the obtained photosensitive resin layer;

a developing step of developing the photosensitive resin layer subjected to the exposure; and

a second exposure step of performing exposure for the developed photosensitive resin layer at a substrate temperature of 100 to 250°C with an illuminance of 80 mW/cm² or more and an irradiation energy of 5 to 30 J/cm².

[Claim 2] The method for manufacturing an insulating resin layer according to Claim 1, wherein the photosensitive resin layer contains an acrylic resin as a main component.

[Claim 3] The method for manufacturing an insulating resin layer according to Claim 1 or 2, wherein the second exposure step is performed using a high-pressure mercury lamp having a luminescence peak at a wavelength of about 365

nm, and the illuminance on the substrate is 80 mW/cm² or more at a wavelength of 350 to 380 nm.

[Claim 4] The method for manufacturing an insulating resin layer according to Claim 3, wherein the second exposure step is performed using a filter for removing rays having a wavelength of less than 300 nm from rays emitted from the high-pressure mercury lamp.

[Claim 5] A substrate for electro-optical devices, comprising an insulating resin layer obtained by an insulating resin layer-manufacturing method according to any one of Claims 1 to 4.

[Claim 6] The substrate for electro-optical devices according to Claim 5, wherein the insulating resin layer has a transmittance of 95% or more with respect to a colored ray having a wavelength of 400 nm.

[Claim 7] The substrate for electro-optical devices according to Claim 5 or 6, wherein the insulating resin layer has a thickness of 3 μ m or more.

[Claim 8] A method for manufacturing an electro-optical device, comprising a step of manufacturing an insulating resin layer according to any one of Claims 1 to 4 or a step of using a substrate for electro-optical devices according to any one of Claims 5 to 7.

[Claim 9] An electro-optical device comprising an insulating resin layer formed by a manufacturing method